

## Claims

- [c1] A method for recovering data from flash media, comprising:  
accessing the flash media at a low level to access raw flash data stored on the flash media;  
searching the raw flash data for file indicia corresponding to a selected file type;  
and  
reading data from the raw flash data based on information in the file indicia, said data comprising a recovered file.
- [c2] The method of claim 1, wherein the flash media comprises a SmartMedia-compatible device.
- [c3] The method of claim 1, wherein the flash media comprises a Sony Memory Stick-compatible device.
- [c4] The method of claim 1, further comprising storing the data corresponding to the recovered file in a new file.
- [c5] The method of claim 4, further comprising enabling a user to name the new file.
- [c6] The method of claim 1, further comprising:  
building a physical-to-logical table mapping physical storage locations to logical storage locations; and  
sequentially searching through logical sectors in search of the file indicia based on the physical-to-logical table.
- [c7] The method of claim 1, wherein the file indicia comprises a file header, and in response to finding a file header the method includes performing the of:  
extracting a file size from the file header corresponding to a file;  
reading data beginning with the file header or a starting point identified by the file header up to the file size.
- [c8] The method of claim 1 further comprising:  
determining a starting location from which to search the flash media; and  
sequentially searching through the flash media for file indicia using one of a

physical or logical storage sequence.

- [c9]        The method of claim 1, further comprising:  
              defining an application program interface (API) comprising a set of pass-through commands to enable a software program to low-level access of the flash media using the set of Pass-through commands; and  
              employing the software program to access the raw flash data searching for file indicia and reading the corresponding recovered file data via the API calls.
  
- [c10]      The method of claim 9, further comprising:  
              defining an API including a plurality of respective sets of pass-through commands, each respective set corresponding to a specific type of flash media;  
              determining a type of the flash media; and  
              employing the set of pass-through commands corresponding to the type of flash media determined with the software program to recover the file.
  
- [c11]      A method for recovering data from flash media, comprising:  
              determining a media type of the flash media; .  
              building a physical-to-logical table mapping physical storage locations to physical storage locations based on the type of flash media;  
              searching the flash media for a file header corresponding to a selected file type using the physical-to-logical table; and  
              reading data from the raw flash data based on information in the file header.
  
- [c12]      The method of claim 11, further comprising:  
              defining an application program interface (API) comprising a plurality of respective sets of pass-through commands, each respective set to enable a software program to low-level access a particular type of flash media corresponding to that set of pass-through commands; and  
              building the physical-to-logical table with a software program using the set of pass-through commands corresponding to the media type of the flash media.
  
- [c13]      The method of claim 12, wherein a set of pass-through commands are employed to access a SmartMedia-compatible flash media device.
  
- [c14]      The method of claim 12, wherein the set of pass-through commands are

employed to access a Sony Memory Stick-compatible flash media device.

- [c15] A machine-readable media having instructions stored thereon, which when executed recover data from corrupted flash media by performing operations including:
- accessing raw flash data stored on the flash media using a low-level access mechanism;
  - searching the raw flash data for file indicia corresponding to a selected file type;
  - and
  - reading data from the raw flash data based on information in the file indicia, said data comprising a recovered file.
- [c16] The machine-readable media of claim 15, wherein execution of the instructions further perform the operation of providing a user interface by which a user may select specific file types for which to search the flash media to recover corresponding files for.
- [c17] The machine-readable media of claim 15, wherein execution of the instructions further perform the operation of:
- building a physical-to-logical table mapping physical storage locations to logical storage locations; and
  - sequentially searching through logical sectors in search of the file indicia based on the physical-to-logical table.
- [c18] The machine-readable media of claim 17, further having instructions stored thereon corresponding to an application program interface (API) comprising a set of callable pass-through commands to enable low-level access to the flash media using, and wherein the physical-to-logical table is built using the pass-through commands.
- [c19] The machine-readable media of claim 15, wherein the file indicia comprises a file header, and in response to finding a file header execution of the instructions further perform the operations of:
- extracting a file size from the file header corresponding to a file;
  - reading data beginning with the file header or a starting point identified by the

file header up to the file size to recover the file.

- [c20] The machine-readable media of claim 15, wherein execution of the instructions further perform the operation of:
- determining a starting location from which to search the flash media; and
  - sequentially searching through the flash media for file indicia using one of a physical or logical storage sequence.